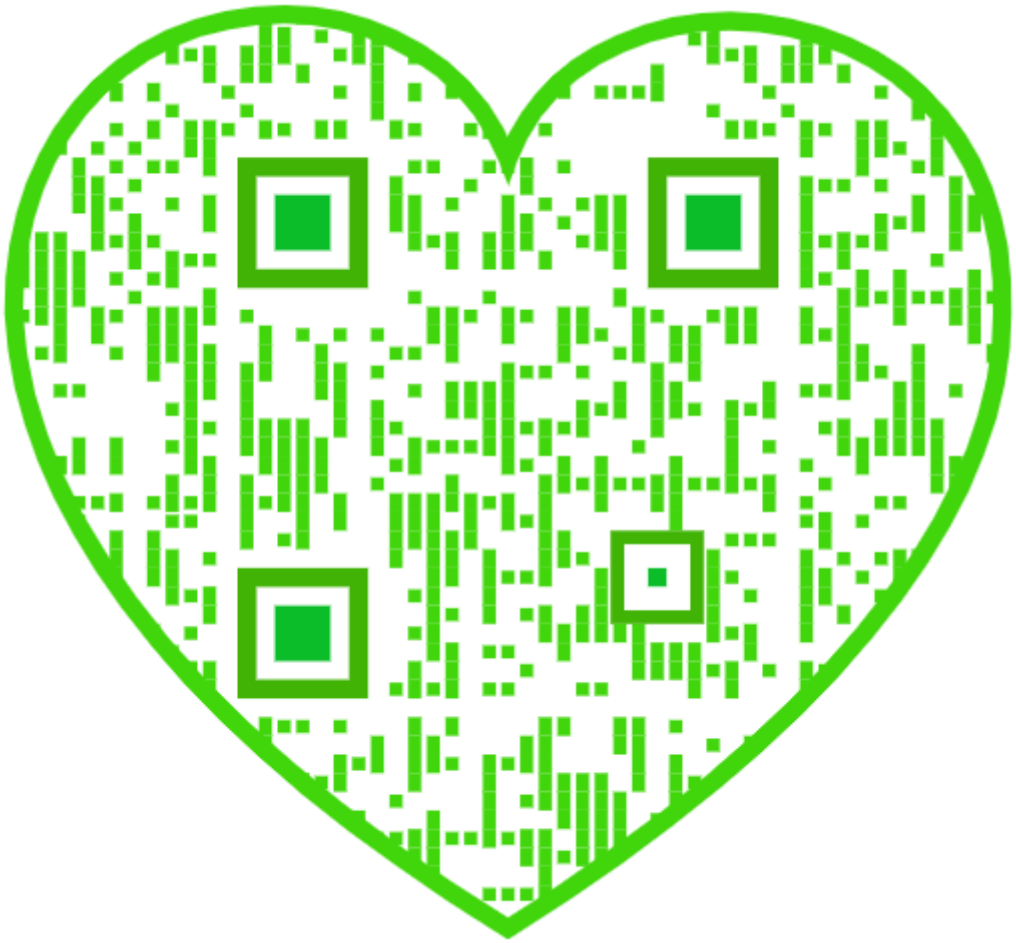

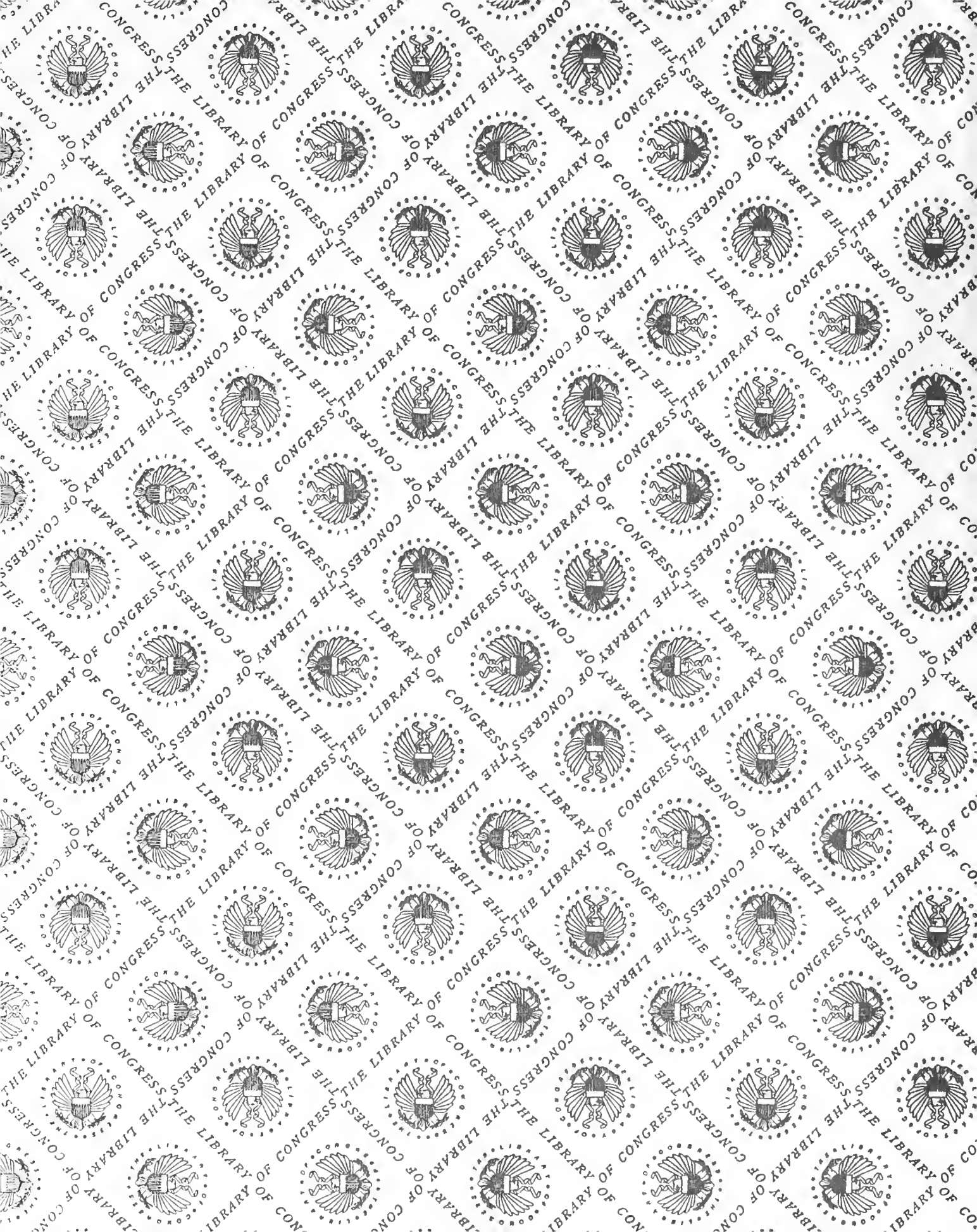
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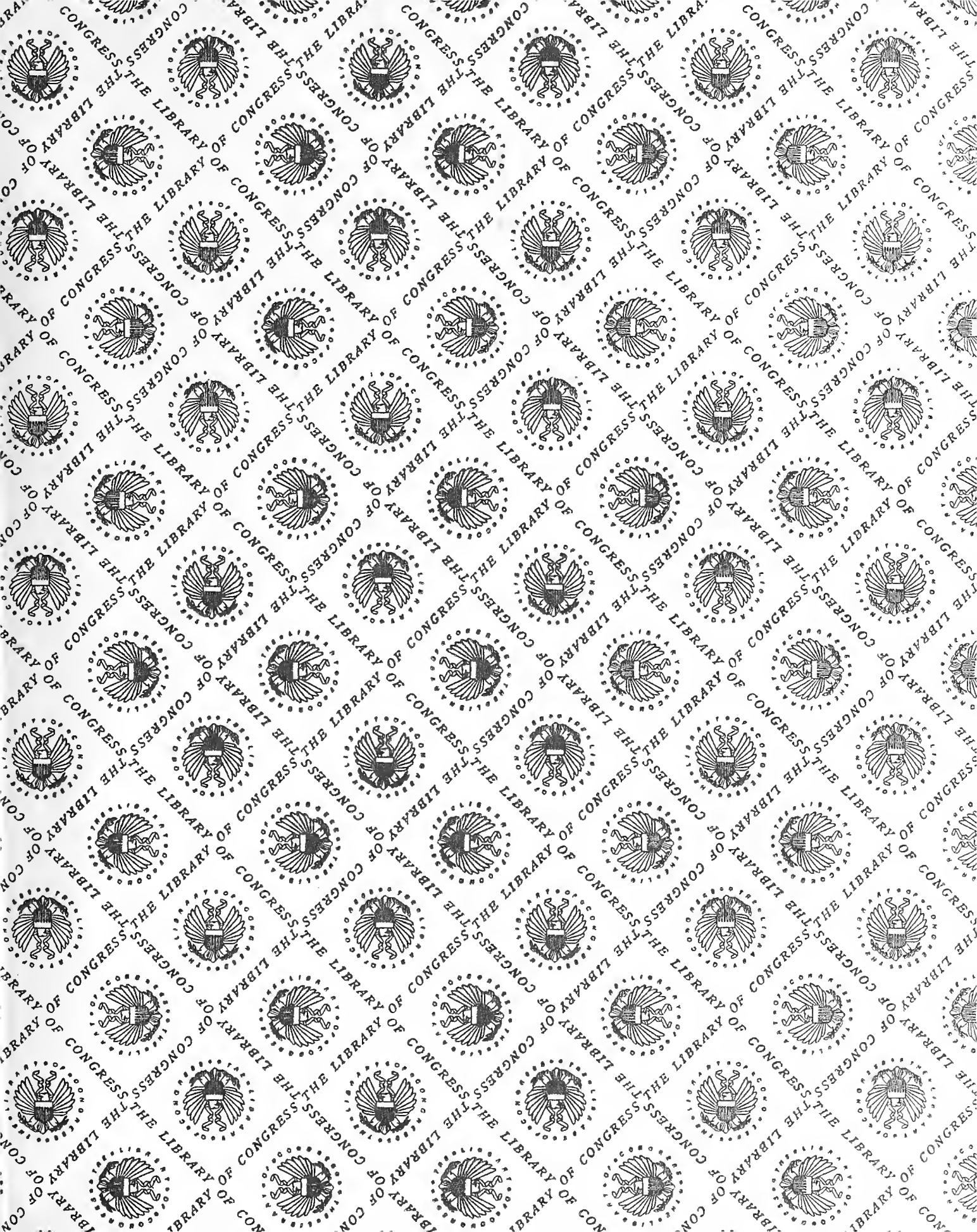
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THE LEATHER SPECIMEN BOOK

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BY

FREDERIC W. LA CROIX
Advertising Manager of
Pfister & Vogel Leather Co.

A practical and descriptive exhibit of the leather industry prepared especially for the use of merchants of leather goods, schools, and students of leather and allied subjects.

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Preface

THE many requests for information about leather that are constantly received by the advertising department of the Pfister & Vogel Leather Co. from merchants of leather goods and teachers and students in schools and colleges prompted the publication a few years ago of "How Leather Is Tanned." This pamphlet in a few mimeographed pages undertook to tell in a simple, concise fashion the essential facts in the manufacture of leather and to fill in some measure the almost total lack of descriptive, non-technical works on tanning.

Though a great many copies of "How Leather Is Tanned" have been supplied to interested persons, it has been evident that it went only part way with regard to instruction in leather and its manufacture. The common experience seems to have been that it is difficult to get a clear grasp of the subject without the opportunity of inspecting typical samples of leather in connection with the reading. It is as an aid in this respect that "The Leather Specimen Book" has been prepared. Used in connection with "How Leather Is Tanned" it aims to give a knowledge of leathers and the process of tanning sufficiently complete for all purposes not connected with practical tanning.

On account of the almost unlimited variety in methods of finishing leather it has been possible to show only the most common and representative types of finishes. In using this book to identify leather it should be kept in mind that a tanned skin may be embossed and finished so as to have its true nature totally disguised.

Acknowledgment for much valuable assistance in the preparation of this book is due to Mr. James Warbasse, Editor of the "Glovers' Review"; The Daniel Hays Co., Gloversville, N. Y.; Hess, Harburger & Drucker, New York; Mr. G. T. Leavitt of Eagle-Ottowa Leather Co., Chicago; Benj. N. Moore & Sons Co., Boston; Mr. W. C. Bliedung of O. C. Hansen Mfg. Co., Milwaukee; A. C. Lawrence Leather Co., Boston; and to the manufacturing and chemistry departments of the Pfister & Vogel Leather Co.

THE AUTHOR.

Introduction

The Raw Material

The great variety in leathers that is met with in beginning the study of this subject is very confusing until it is realized that most of this difference exists only in the treatment of the surface by embossing, coloring, or finishing. The kinds of skins available are restricted within a small range, and the methods of tanning follow along a few general lines.

Leather may for the purpose of this discussion be classified in four different ways: 1, by the kind of skin; 2, by the tannage; 3, by the method of finishing; and 4, by the use for which it is intended.

1. Most of the leather in common use is made from the hides and skins of domestic animals, those of Cattle being by far the most important, followed by Goatskins, Sheepskins, Horsehides, Pigskins, and in a small measure Dogskins. Many skins of wild animals, principally those of the Kangaroo, Deer. Peccary, Alligator, Seal, Walrus, and Buffalo are in fairly general use. Cattle hides are used chiefly for shoe upper and sole leathers, harness, belting, upholstery, bag and case leathers, and to some degree in bookbinding. Goatskins are used for shoes, gloves, bookbinding, and fancy leathers. Sheepskins are used for shoe linings, gloves, and the greater part of the fancy leathers. Horsehides are used for shoes and utility gloves. Pigskins are used for the inner parts of shoes, utility gloves, bookbinding, fancy leathers, and saddle seats. Dogskins find limited application in glove leathers. Kangaroo is used for fine shoe leathers. Deerskins, known as Buckskins, are used for both shoes and gloves Peccary for utility gloves, Alligator for bag and fancy leathers, Seal for bags, bookbinding, and fancy leathers, Walrus for jewellers' polishing wheels, and Buffalo for heavy soles.

Tannages

2. Tannages are divided into two main classes, the Mineral and the Vegetable. The mineral tannages are subdivided into the Chrome and Alum. In the former the leather is tanned with basic chromic sulphate and the tannage set with soda ash. The chrome tannage is used for the majority of shoe leathers, for utility and some dress gloves, and in a limited way for sole and belting leather. Alum-tanning, also known as tawing, is done with sulphate of alumina and common salt. This is the principal tannage for fine glove leathers.

The vegetable tannages are limited only by the number of plants, barks, and other vegetable substances which yield tannins in sufficient quantities for commercial use. In practice only a few tannins offering the advantages of cheapness, large supply, and greater suitability are used. Hemlock and Oak Bark liquors and extracts separately or in combination are used more than any other vegetable tannins. Most sole and belting leather, practically all upholstery, harness, bag, strap and case leathers, and some shoe and bookbinding leathers are tanned with Hemlock or Oak or both. Sumac is the principal tanning material for bookbinding leathers, on account of its giving a light-colored leather that is resistant to light and decay. Gall-nuts, Myrobalans, Divi-divi, and Oakwood are also used in bookbinding leathers. Valonia, and Chestnut Oak Extract are used for Sole Leather in connection with Oak and Hemlock. Quebracho is used in various leathers, often with Hemlock and Oak. Gambier and Palmetto are used in many of the softer leathers for shoes, gloves, etc. Some leathers are tanned with a mixture of three or four different vegetable materials as may be necessary to give the color, firmness and other properties desired.

A distinct tannage of limited use is the oil tannage used for making some glove leathers, particularly chamois and Buckskin. Cod oil is the oil commonly used. Its oxidation tans the leather.

The object of tanning is to coat the fibers of the leather with some insoluble material so as to prevent their decay. The mineral and vegetable materials and oils used for tanning are made to permeate the leather and coat each fiber to accomplish this purpose.

Methods of Finishing

3. Leather may be finished on the grain or hair side, on the flesh side, or on a split surface made by splitting the leather into two thicknesses. These three primary methods are given as follows with subdivisions and examples from the specimens.

I. Grain Finish.
   1. Full or natural grain.
      a. Natural color of the tannage. Russet Collar.
      b. Colored both sides by drum dyeing. Chrome Veals, Capeskins.
      c. Table or brush colored—one side. Colored Glacé Glove leathers.
      d. Drum dyed, seasoned, and glazed. Glazed leathers.
      e. Hand-boarded after process b, c, or d. Boarded Veals, Morocco.
      f. Embossed after process b or c. Bag leathers.
      g. Enamelled or japanned. Patent shoe leathers.
   2. Grain buffed. (Snuffed.)
      a. Smooth finish. Snuffed Chrome Kip, Kangaroo Sides, Harness.
      b. Velvet finish. Mocha, Buckskin, Buffed Horse.
      c. Enamelled. Grain shaved off. Hand Buffed Upholstery.

II. Flesh Finish.
   1. Smooth. Cordovan, Wax Calf.
   2. Velvet finish. Suede or Ooze Leather.

III. Split Surface Finish.
   1. Smooth. Flexible Splits.
   2. Velvet finish. Chamois, Chrome Side Splits.
   3. Enamelled and embossed. Machine and Deep Buffed Upholstery.

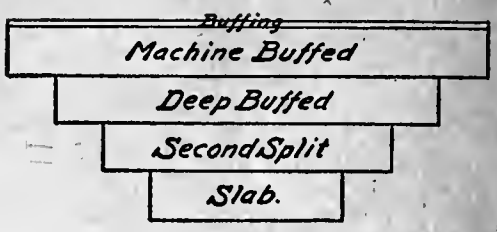
Embossing by flat plate or steel roller allows of great variety and imitation in the surface appearance of leather. Sheepskin, for example, may be made to look like seal or alligator by photographing the seal or alligator grain and etching it by chemicals on the embossing plate or roller which is passed over the skin and prints the etched grain on it with the aid of heat and pressure.

Uses

4. Shoes are the most important use for leather and after them gloves, harness, bags, cases, belting, upholstery, bookbinding, straps, and various novelties and articles in common use. The purpose for which a leather is intended will determine the raw material, tannage, and method of finishing.

Splitting Hides

The manner in which hides are split into thicknesses to make several pieces of leather deserves some explanation. For sole, harness, and belting the whole thickness of the cowhide is used. The lighter skins as goatskins and coltskins are not split, but are shaved down to an even thickness all over. The heavier calfskins have a light split taken off the thicker parts by a knife blade splitting machine. This split is finished like sample No. 8, p. 5. Sheepskins are used full thickness or split into two thicknesses for gloves and bookbinding. For examples of the upper and lower splits see p. 6, No. 4, and p. 5, No. 7. Cowhides for shoe upper, bookbinding upholstery, bag leathers, etc., are split into two or more thicknesses. The belt-knife splitting machine used is regulated to make the grain or upper split any desired thickness from the thin paper-like buffing p. 6, No. 6, to the heavy waterproof shoe leather p. 2, No. 9. Shoe leathers are usually split into two thicknesses only, the flesh split being used for the leathers shown on p. 3, No. 10, p. 4, No. 6, p. 5, No. 8.

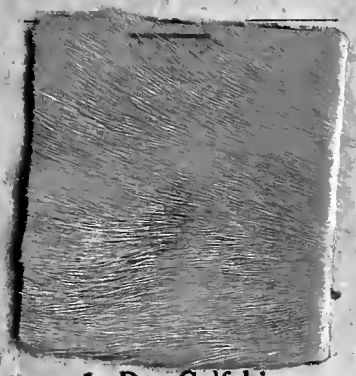


Upholstery leathers are split into three to five thicknesses. The illustration represents the order in which the splits come and is drawn to convey the fact that successive splits fall short of the original area of the hide because the hide is thickest in the center and lightest along the flanks. The buffing is a very thin grain split used for bookbinding, p. 6, No. 6. The three following splits are used for upholstery, p. 7, Nos. 3, 4. The "slab" makes a very cheap leather for various uses. The thickness of the splits varies according to the demands of the trade.

For a more complete description of tanning processes than given in this book, the reader is referred to "How Leather Is Tanned," a pamphlet issued free by the publishers of this book, or to the various books on tanning and leather manufacture to be found in public libraries.

Leather in Process of Tanning

(Shoe Leather)

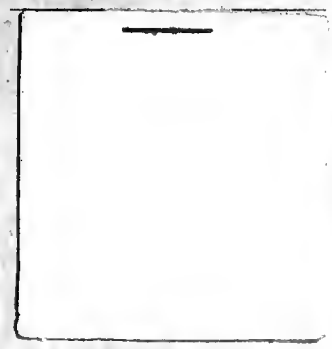


1. Dry Calfskin

Hides and skins usually come to the tannery either wet-salted or dry. This is a piece of dry calf skin which comes spread flat and tied in bales. When taken from the animal it was hung up in the sun till dry. It must be soaked till soft before it can be worked.

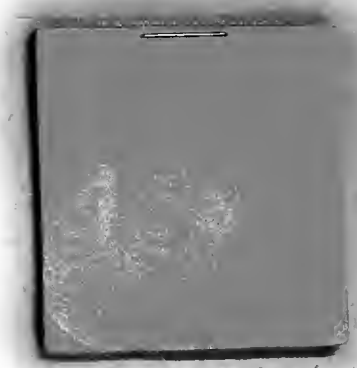
2. Pickled Calfskin (Grain Side)

This skin after washing, and having the hair and flesh removed, was pickled in salt, sulphuric acid, and water. This "pickle" thoroughly cleanses the skin, opens up the pores, and gets it into an acid state ready for chrome tanning.



3. Chrome Tanned Calfskin (Grain Side)

The same skin after tanning. The chrome liquor gives the skin a light bluish-green color throughout. The "Grain" side is the side on which the hair grew. Most shoe upper leathers are chrome-tanned.

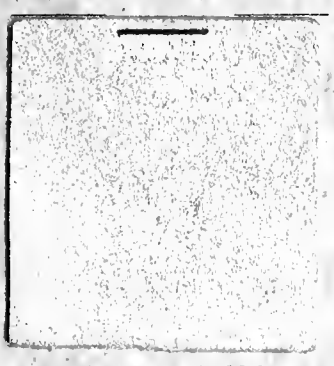


4. Vegetable Tanned Cowhide (Grain Side)

Tanned in Hemlock bark liquor. The vegetable tannins give a reddish or yellow color to the skin. Note coarser grain of the cowhide due to larger hairs.

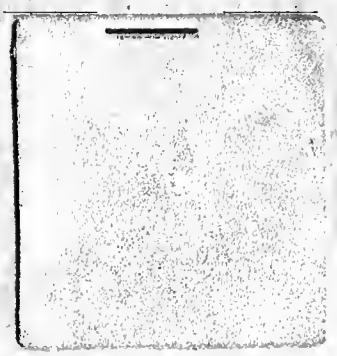
5. Chrome Calfskin Flesh Side—Unshaved

This shows the flesh side of No. 3 after tanning. There are still some shreds of flesh on it.



6. Chrome Calfskin Flesh Side Shaved

This shows No. 5 after it has been shaved on flesh side by the shaving machine and the thicker parts split off by the splitting machine.



7. Chrome Split Split Side

The skin from which this sample was taken has been split into two thicknesses. The lower or flesh split, with surface along which skin was split is shown. The under side of this sample is the flesh side. Grain splits are known as "Grains" and flesh splits as "Splits" in the trade.

8. Chrome Split Fat-liquored

This shows No 7 after it has been "fat-liquored" or drummed in an emulsion of oil and soap. It is now leather. The natural oils of the skin were removed by liming to loosen the hair and the tanned skins must be fat-liquored to restore their life and softness.

9. Chrome Calf

Fat-liquored and Dyed Black

This shows No. 36 fat-liquored and dyed black. The dyeing was done in a drum in which the skins were rolled with a solution of logwood crystals or black aniline dyes in water.

10. Chrome Calf

Fat-liquored and Dyed Brown

This shows No. 34 dyed brown for tan leathers. Dyed with fustic and aniline dyestuffs in a drum. Skins to be dyed on one side only are brushed or sponged over with the dye on the grain side on a table, called brush or table coloring.

11. Glazed Chrome Calf

A polishing mixture consisting of albumen, shellac, a black dye, and other materials was sponged over this skin and it was then "glazed" or rubbed mechanically with a glass cylinder to bring up a polish. This gives a permanent finish. This skin is now ready for making into shoes.

12. Vegetable-Tanned Cowhide. Natural Finish

This is No. 4 finished in the natural color of the tannage without dyes for horse collar leather. The surface color of leather, unless natural finish, does not indicate the tannage as both chrome and vegetable-tanned leathers are finished black, tan or other colors, and dull or bright.

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Shoe Upper Leathers No. 1

(Calf and Cowhide)

1. Glazed Chrome Calf

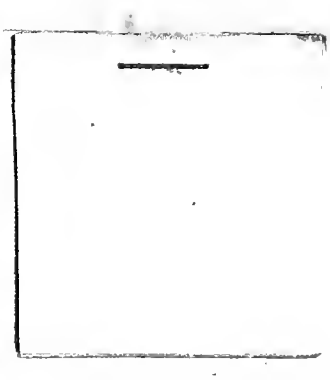
A high grade black calf leather for fine shoes. Chrome-tanned. Glazed finish. Note the fine, smooth calf grain. Chrome tanning gives the softest and strongest leather.

2. Russia Calf

A high grade colored calf. Tanned with Gambier, Quebracho or other vegetable tannins. The vegetable tannage gives a fuller and more porous leather than the chrome. Birch oil gives it the "Russia" odor. It was originally tanned in Russia with birch bark.

3. Suede Calf

Skin of a very young calf finished on the flesh side by holding this side against an abrasive wheel to raise a fine nap. Worn flesh side out for ladies' shoes. Chrome-tanned and very soft. Sheepskin is also treated this way. Calf makes the best suede leather for fineness and durability.

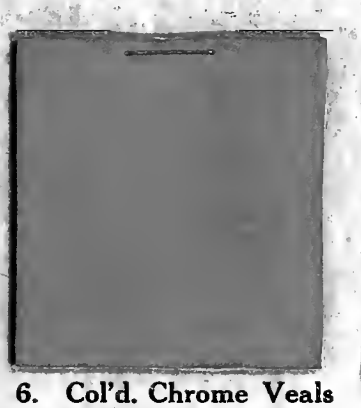


4. White Buffed Calf

Tanned in Alum and Chrome. Alum gives a white tannage. Buffed on grain by holding it against an emery wheel. This removes small defects in the grain and gives the leather a soft finish. It should be distinguished from suede calf which is finished on the flesh side. Dusted with fine talcum and brushed.

5. Boarded Chrome Veals

Made from a large (15-25 lb.) calfskin from animal that has had good care and been protected in cold weather. Fine grain but not as fine as smaller calfskins. Heavier and larger skin. Glazed and hand boarded by rolling grain over on itself to make a square pattern. Used for shoes or



6. Col'd. Chrome Veals

Same class of skin as No. 5, calf about a year old. Chrome tanned, dyed brown, and finished dull for outing boots. A very strong, serviceable leather.

7. Snuffed Chrome Kip

Kips are coarser skins than veals due to an older or poorer fed animal (grass fed). The grain of this sample was scratched or defective so top of it was snuffed off by holding grain side against an abrasive wheel. Sponged over with black dye and finished dull. Makes a durable shoe leather. Snuffed calf and sides are also common.

8. Black Chrome Sides

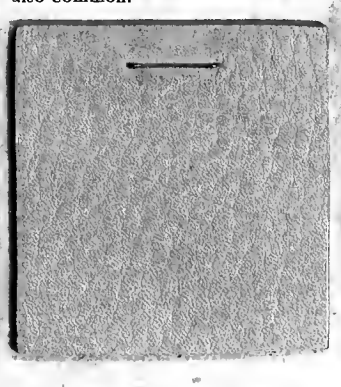
Chrome-tanned hide of a young cow or steer. Called "Sides" because the hide is divided along the middle of the back into two sides on account of size. Coarser grain than any of the preceding, but wears just as well. Finished like No. 1. Cowhides are too thick for shoe uppers so are split into two thicknesses and flesh side used for something else.

9. Chrome Waterproof Sides

Split into a heavier grain than No. 8 and stuffed with grease to make the leather as nearly waterproof as possible. Brush-colored black on grain and "pebbled" to make a pattern on grain. Natural chrome color on under or split side. Used for lumbermen's and other heavy shoes.

10. Kangeroo Sides

Cowhide tanned with Hemlock and other vegetable tannins. Part of the grain has been "buffed" off or removed by hand with a special sharp blade. Hand boarded. Used for work shoes.



11. Smoked Elk Sides

A soft chrome-tanned cow or steer hide for work or athletic shoes. Very strong and tough and stays soft. Hung in a smoke-house to give it a color, imitating the Indian tannage. Called "Elk" because supposed to resemble Elk skin in appearance. Made in black and colors. Real Elkskin is tanned for very heavy gloves for foundry work.

12. Chrome Retanned Sides

A side leather in combination of chrome and vegetable tannages to give it strength, softness, and resistance to barnyard acids. Boarded and brush colored on the grain. Hand-buffed like No. 10. Stuffed with greases. For use in heavy work and farm shoes.

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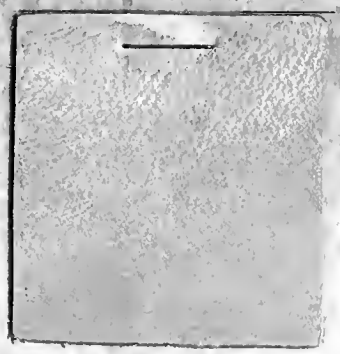
Shoe Upper Leathers No. 2

Miscellaneous Skins

1. Black Glazed Kid

Goatskin chrome-tanned and glazed to a high finish. Note the characteristic grain due to the nature of the goat's hair. Makes a light, comfortable shoe, softer and more porous than calf. Few real Kidskins are used for shoes as they are too small and light. The chrome tannage, now by far the most generally used tannage for shoe upper leathers, came into commercial use with chrome glazed kid about 1900.



2. Colored Glazed Kid

Goatskin, chrome-tanned and glazed. Glazed kid lends itself to dyeing in a great variety of delicate and beautiful colors for ladies' shoes. The white are tanned with alum in addition as alum is necessary to give a white leather. Goatskins for glazed kid are imported from all over the world.

3. Mat Cabretta

The Cabretta is a cross between a sheep and a goat and its leather partakes of the character of both. It comes from South America chiefly. Very common is a dull or "mat" finish for tops of patent leather and other shoes. Chrome-tanned.

4. Chrome Sheep

Domestic sheepskin, chrome-tanned. This sample has been finished dull on the grain. It is also made with a glazed finish. The grain is rather different than that of glazed kid. Used for shoe linings, baby shoes, and many other purposes. It is cheaper than goatskin and is too porous and lacking in strength and stability for shoe vamps.

5. Glazed Kangaroo

Skin of the Australian Kangaroo. Chrome-tanned and glazed the same as glazed kid. Kangaroo leather is tough and supple, does not peel, and keeps out water well. It is a rather scarce and expensive leather used for high grade shoes.

6. Glazed Colt

Chrome-tanned coltskin or horsefront, (Front part of a horse hide). A very strong, durable shoe leather used for medium grade shoes. Tanned and finished like glazed kid or calf.

7. Patent Colt

Coltskin or horsefront. Russia has been the chief source of supply for colt-skins and fine horsefronts. Chrome-tanned. The grain has been varnished over with a japan prepared from boiled linseed oil and guncotton and then baked on in ovens. The hard inelastic finish makes this leather uncertain in wear, but its luster cannot be equalled. Patent leather is also made from cowhide, goatskins, etc.

8. Cordovan

Horse butt (rear part of horsehide) tanned with gambier and other vegetable tannins. Colored in black, tan, etc. and finished on the flesh side. A very close waterproof leather because of the impermeable shell in this part of the horsehide. Used in high grade men's shoes. It is expensive and is imitated in calf and sides. Derives its name from Cordova, Spain, where it was first made.

9. Wax Calf

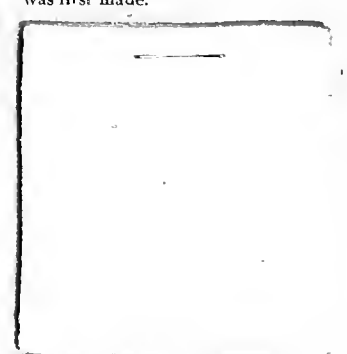
Calfskin finished on flesh side as wax or "French" calf. Tanned with chrome and vegetable tannins or with vegetable tannins only. Finished on flesh side by "waxing" with a mixture of lamp black, waxes, flour, oil, soap, glue, etc. An excellent wearing leather and was the earliest method of finishing calfskins. It has now been mostly superseded by the grain finishes.

10. Wax Flesh Split

The flesh or under split from a cowhide, the upper or grain split being used for cowhide grain leatber. Tanned in hemlock bark liquor. Finished with a "paste" on flesh side similar to wax calf. Makes a cheap shoe leather.

11. Buffed Sides

Cowhide finished to resemble buckskin. The white is usually tanned with chrome and alum, the colored with chrome only. The grain has been held against an emery wheel and partly buffed off, leaving a velvety nap. This should be distinguisbed from suede leather which is finished on the flesh side. Dyed in various shades.



12. Buckskin

Made from deerskins imported from Mexico and South America. Formerly a pure oil-tanned leather. Now alum is employed in addition. The white is tanned chiefly with alum as this produces a white leather. The grain has been buffed on an emery wheel. The color is brushed over the grain side on a table. On account of its scarcity and expensiveness buckskin is imitated very largely in buffed sides.

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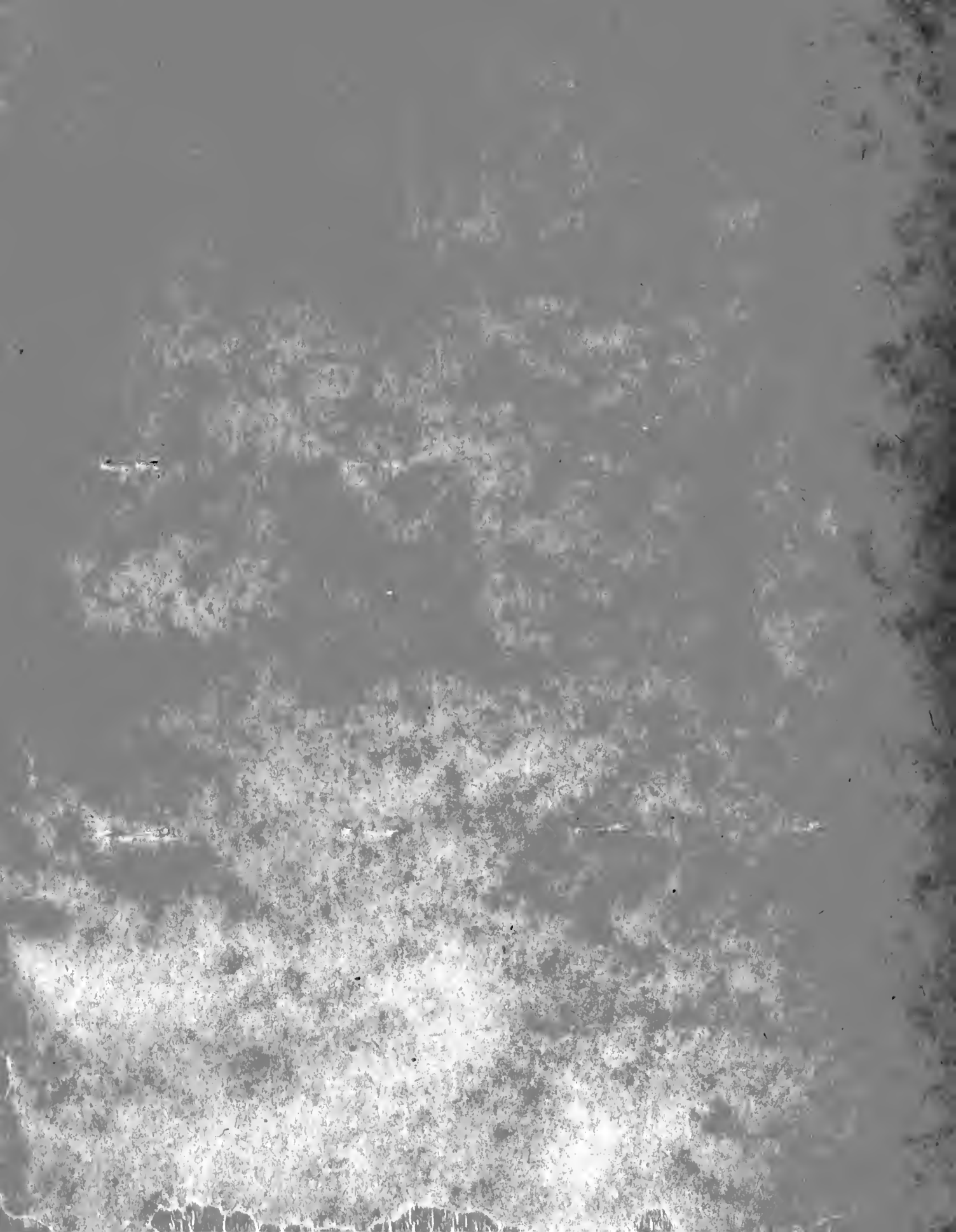


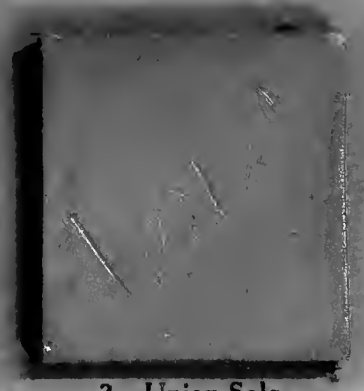
Sole, Harness, and Belting Leathers

1. Chrome Sole

In sole leather the full thickness of cattle hides is used, Chrome-tanned sole is the strongest and lightest sole leather. It is slippery and porous and has a rough edge. Sometimes stuffed with grease to make waterproof. Used chiefly in outing and athletic shoes.

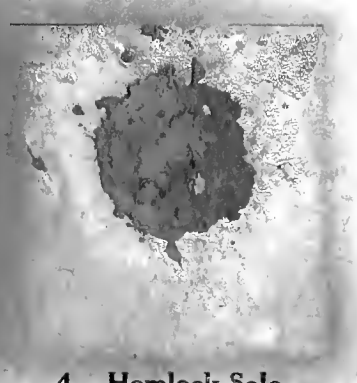
2. Oak Sole

Tanned with liquor or extract of oak bark. This is the best bark-tanned sole leather. Used for men's fine shoes and more used by repairers than any other sole leather. Can be sewed or nailed.



3. Union Sole

Tanned with a combination of hemlock and oak bark liquors or extracts. Not quite as firm as oak sole. Used for women's shoes and the better grades for men's shoes. Sews well. Varies in color according to proportions of oak and hemlock used.

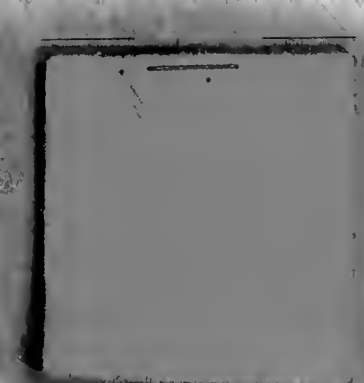


4. Hemlock Sole

Tanned with Hemlock bark liquor. A firmer leather than oak or union. Used for medium price men's shoes and work shoes, chiefly nailed work. Used also by repairers, especially for heel top lifts. Cheaper than oak or union.

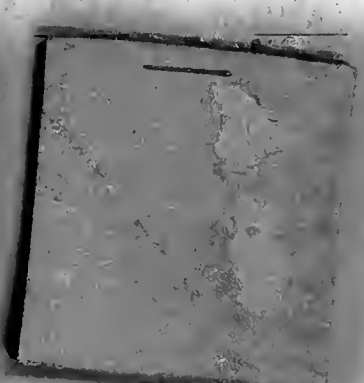
5. Buffalo Sole

The hide comes from the true Buffalo of Asia and the East Indies. Hemlock tannage. Coarser and more porous than cowhide. Used for heavy nailed shoes.



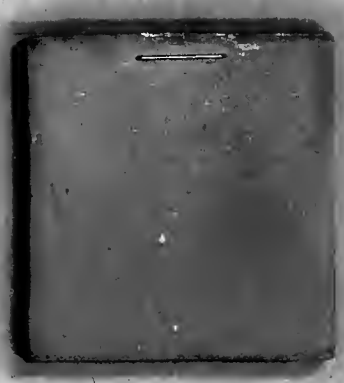
6. Flexible Split

The under or flesh split from a cowhide. Tanned first in chrome, then in hemlock bark liquor. A firm leather used for inner soles.



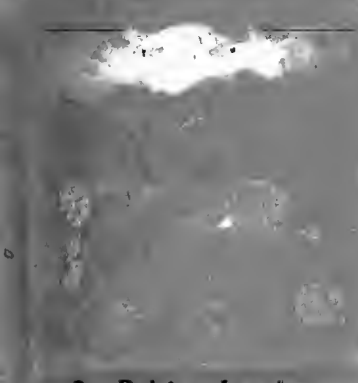
7. Pigskin Sole

Pigskin tanned in bark or chrome and bark liquors and used for inner soles. Comes in strips taken off the loin. The grain is very noticeable. Sometimes the grain is split off for pocketbook leather, etc. and the flesh split is used for inner soles.



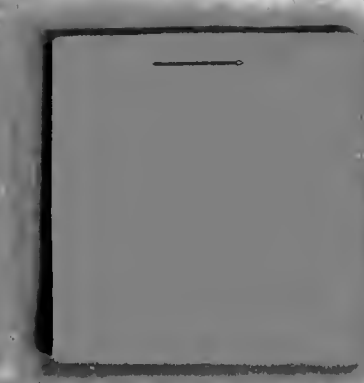
7. Razor Strop Butt

Made from horse butt (rear end of horse hide) tanned first in chrome, then in a vegetable liquor. Grain partly buffed off by holding against an emery wheel. Fat-liquored to render it pliable. Cowhide tanned and finished in much the same way is used for soles.



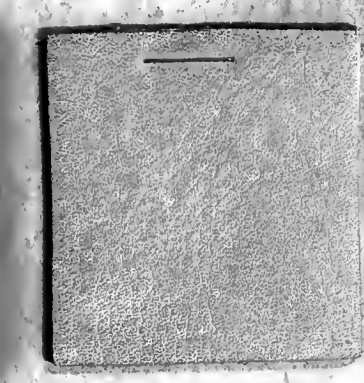
9. Belting Leather

Cow or steer hide tanned like Oak Sole with perhaps an addition of gambier or other vegetable tannins to make it softer. After tanning Belting Leather is stuffed with greases and worked over to render it pliable.



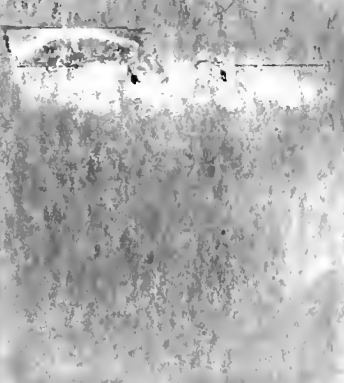
10. Russet Collar.

Hemlock bark tannage, natural finish. From a cow or steer hide split to a lighter weight than harness leather. Used for horse collars. It is also finished in black. The russet finish is also used for welting in shoes.



11. Chrome Lace Leather

Chrome-tanned hide of a young cow or year old calf. A strong, durable leather with dyed finish. Used for saddlery laces. Raw-hide lace leather is tanned with oils or fats and alum.



12. Union Harness

Tanned with a combination of oak and hemlock bark liquors or extracts. The whole thickness of a cow or steer hide is used. Stuffed with greases to render it pliable. The grain is partly removed by hand and then blacked and brushed. Used for harnesses.

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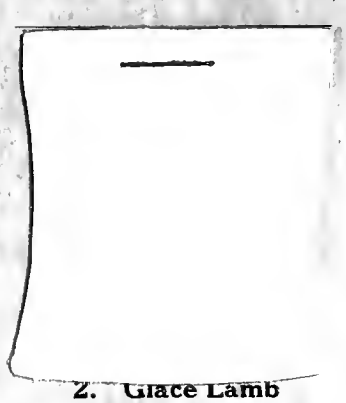
Glove Leathers

1. Glace Kid

Kidskin, alum-tanned in France. The most desirable real kidskins are the "French National Skins". Glacé Kid gloves are usually imported due to the tariff on the leather. Glacé Kid makes the finest and most durable dress gloves known as Real Kid gloves to distinguish them from lambskin gloves commonly called Kid gloves. White is the natural color of the alum tannage. Tan or black kid is made by brushing dyes over the grain side.

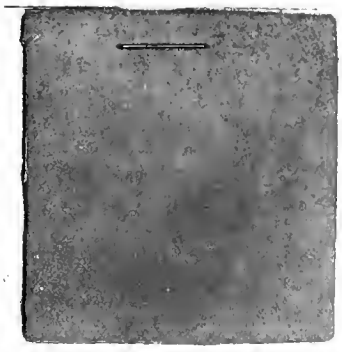


2. Glace Lamb

Made from fine European lambskins. Tanned with alum and imported in the finished state. The heavier skins are used for men's and the lighter for women's fine gloves, white or colored on the grain. Glacé lamb looks much like Glacé Kid but has not as much strength. Glacé leathers are finished with the grain surface on. The grain is rubbed with a plush wheel after applying wax or talcum. Lambskin is used for most of the "Kid" gloves on the market.

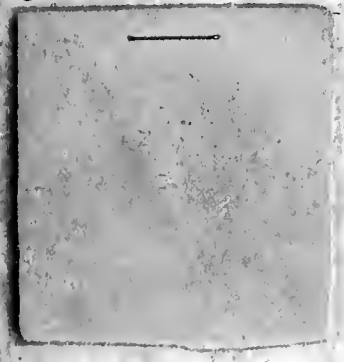
3. Capeskin

Capeskin first came from the Cape of Good Hope district. Now lambskins from many countries are also used, some of the finest coming from Russia. The best skins have a hairy or wiry wool, the texture of the skin being between that of a sheep and a goat. The skins are large and heavy compared with the preceding. Chrome-tanned and washable. "Dipped" or dyed in a drum. Used for the better and medium price dress and street gloves.



4. Undressed Mocha

Skin of the hair sheep of Arabia, Persia, and Northeast Africa. Derives its name from the seaport of Mocha, Arabia. Alum-tanned and treated with salt, egg yolks, flour, and olive oil. Because of imperfections the grain is friezed or buffed by holding it against a fine emery wheel to raise a soft nap. "Dipped" or dyed in a drum to color both sides. Mochas are very durable and go into the finest of undressed gloves. They are an American invention.



5. Buckskin

Deerskin from Mexico, Central or South America. Oil tanned. The skins are stuffed with cod oil and worked and then hung up till the oil has tanned the leather. Buffed on the grain like Mochas and table-colored. The pelts are heavy and in the full thickness are made into utility gloves. For light weight gloves the leather is split to the required thickness. Buckskin makes a warm, durable, high grade glove.

6. Suede Lambskin

Domestic lambskin, chrome-tanned. Finished on the flesh side by holding this side against an emery wheel till a smooth, velvety nap is raised. Used for medium price gloves. Domestic lamb or sheepskins have a coarser grain than the imported and in a grain finish are used for utility and work gloves. Lamb and sheepskins with fine, soft wool yield interior glove leather. The finest and strongest leather comes from animals with a hairy

7. Chamois

Made from flesh splits of sheepskins. Named after the Chamois Goat of Switzerland. Tanned chiefly with cod oil. Alum in the white and chrome in the colored are also used. The best skins are selected for the cheaper suede gloves, and are buffed and dyed. The other skins are used for chamois vests, polishing cloths, etc. Chamois leather is washable with soap and water. It is largely used to imitate doeskin. The real doeskins are similar to buckskins but lighter in weight.

8. Chrome Side Split

The under or flesh split of a cowhide. Chrome-tanned. Buffed on the split side. Used for cheap work gloves and shoe gussets and as a facing for the palms and fingers of canvas gloves. Dyed in many shades or used in the natural chrome color. A cheap and durable leather.

9. Buffed Horse

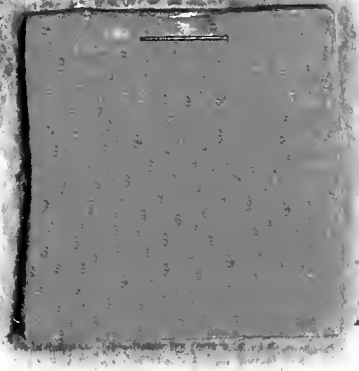
Front part of a horsehide. Chrome-tanned. Buffed on the grain and dyed and table colored. Made into heavy gloves for driving, utility wear, etc. A very soft and strong leather.

10. Grain Horse

Same class of hide as No. 8, chrome-tanned and finished with the full grain. Table-colored. Used for automobile gauntlets and work gloves. Very strong and durable. South American sheep are tanned and colored the same way to make a leather of very similar appearance. The sheep makes a cheaper and less durable glove. Dogskins are also dressed in this manner for utility gloves.

11. Pigskin

Domestic pigskin, chrome-tanned and finished in the natural chrome color as in this specimen or dyed yellow. Makes a strong, soft leather for work gloves. The grain is characteristically coarse and porous.



12. Peccary

Skin of the peccary, a kind of wild pig of Mexico and South. Chrome-tanned and dyed. It is a heavy skin with very coarse grain. Used for working gloves and gauntlets where strength and softness are needed.

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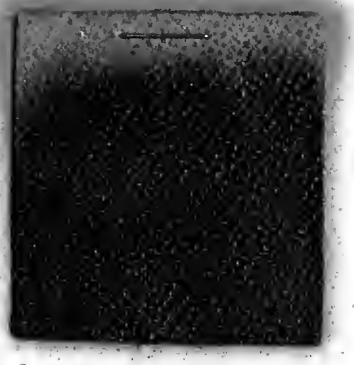
Fancy Leathers No. 1

Bookbinding and Light Leathers

1. Morocco Goat

Goatskin tanned with sumac, the genuine Morocco tannage which withstands light and decay the best and makes the highest grade bookbinding leather, also used for handbags, etc. Colored, embossed and hand boarded. India goat and sheep are used as substitutes for Morocco goat and resemble it closely though the sheep especially is less durable. Morocco sealskins are also made. Morocco is so called because first made by the Moors.

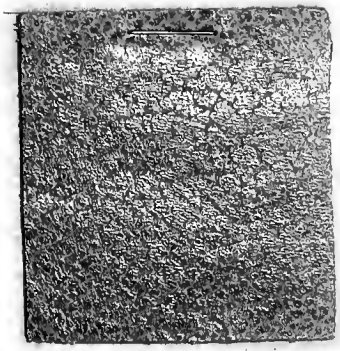


2. Bock (India Sheep)

Sheepskin bark-tanned in India, retanned here with sumac. India-tanned sheep and goat skins make a durable, soft leather, and are embossed in many patterns. The heavy skins are used for bags and cases and the light for bookbinding, novelties, shoe tops, etc. The sample shown is a typical bookbinding leather. "Bock" is Hindu for goat leather, used, however, for India Sheep. India Goat is rather more durable than the sheep.

3. Spanish Goat

Goatskin tanned with alum and gambier. The "Spanish" grain is produced as follows: A brown, green or other paint is brushed over the grain. When this is dry the skin is wrinkled. A black or other dark paint is then applied so as to fill in the creases. This forms the irregular color pattern. Used for books, novelties, upholstery, etc. This same "Spanish" grain is also made in sheep, cowhide, and cowhide splits, chiefly for furniture use.



4. Skiver

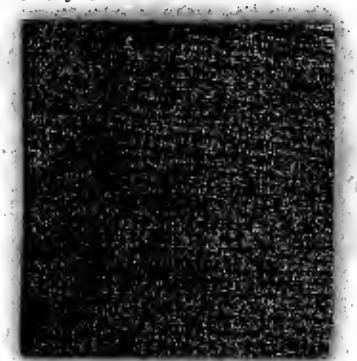
The grain split of a sheepskin. The flesh splits used for Chamois. Tanned usually with sumac. A pattern has been embossed on the grain. Dyed and finished for pocket books or cheap bookbinding. Made in plain finish for hat sweatbands. It is thin and has little strength, but can be finished in many brilliant colors and embossed in a great variety of patterns.

5. Red Russia Calf
(Light Diced Calf)

Calfskin tanned with hemlock, quebracho, or other vegetable tannins. Embossed with crossed lines and glazed. Used largely for pocket and memorandum books. A leather of fine quality and quite expensive. Russia Calf is so called because first tanned in Russia with birch bark. The odor of this tannage is now duplicated in any tannage by spraying birch oil on the grain.

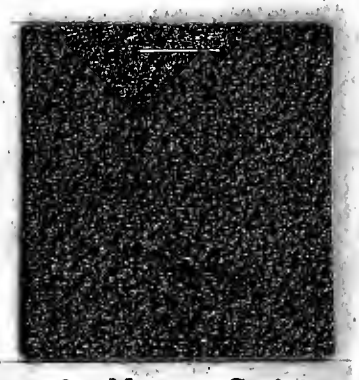
6. Buffing

A thin grain split from a cowhide. (see P. 7, No. 3.) Tanned with sumac or sumac in combination with other vegetable tannins. Dyed and embossed with a "straight grain" (pattern of parallel lines). Used for books, novelties, etc. Buffings are frequently embossed with seal, morocco and other grains for pocket-books, cases, etc.



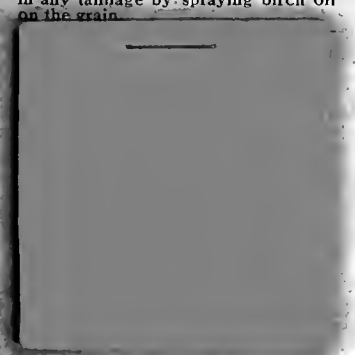
7. Book Binding Sides Cross Grain

Cowhide tanned with oak and hemlock bark liquors. Split to various weights. Much thicker and more substantial than the Buffing. This sample was boarded or grained in two directions to give a cross pattern. Also comes embossed with a Seal Grain for music rolls, bags, etc.



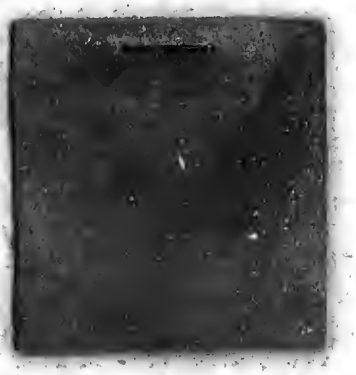
8. Morocco Grain Cowhide

Cowhide, vegetable tannage, brush colored on the grain and embossed with a Morocco grain in imitation of the Morocco Goat. It is also quite commonly embossed with a Seal grain. Used for small bags, novelties, and bookbinding.



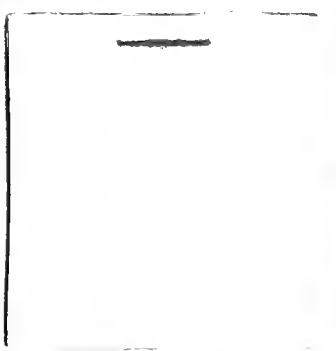
9. Law Sheep

Sheepskin tanned with quebracho with perhaps other vegetable tannins. Finished on grain in the natural color of the tannage. Used for law books and other books and novelties. The same style of leather is also made from Skivers, lambskins and calf.



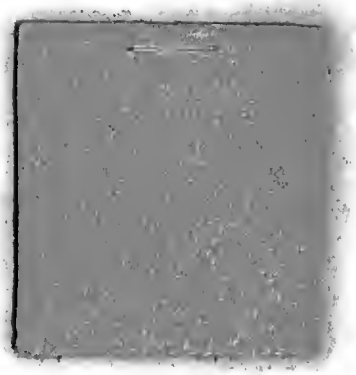
10. Suede or Ooze Sheep

Sheepskin chrome-tanned and dyed in various colors. Finished on flesh side against an emery wheel to raise a smooth velvety nap. Used for bags, pocket books, book covers, etc. Also called moleskin from having a soft nap like the fur of a mole.



11. White Alum Sheep

Sheepskin tanned with alum. Used for novelties, souvenir book covers, dance programs, etc. Finished on the grain. This class of sheep leather comes in a great variety of tints in the chrome tannage. The White Alum is also finished on the flesh like Suede Sheep.



12. Pigskin

Pigskin tanned with quebracho and finished in the natural color of the tannage. It comes dyed in various colors also. Used for bookbinding, pocket books, etc. Makes a strong, durable leather of coarse and porous grain. The grain pattern closely resembles that of the human skin.

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Fancy Leathers No. 2

Upholstery and Heavy Leathers

1. Spanish Grain Upholstery

Cowhide tanned with a combination of bark and other vegetable tannins as hemlock, oak, quebracho, etc. Has the full grain of the hide and is the best class of upholstery leather. Used for leather chairs, etc. Finished with a paint made chiefly of linseed oil and a pigment which is brushed on the grain and allowed to dry. For the name and process see P. 6, No. 3.

2. Hand Buffed Upholstery

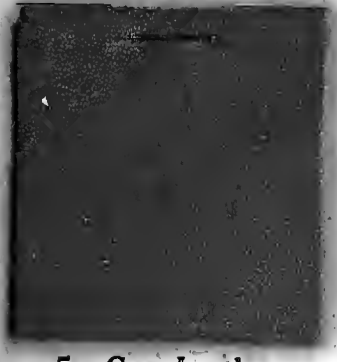
Tanned like Spanish Grain. The grain has been partly removed on a shaving machine. Several coats of a paint or daub finish of the desired color are then brushed on. Each coat is baked on in turn and before the last coat the surface is pummiced smooth. This process produces a lustrous and durable enamel finish. This specimen was then embossed in a "straight grain" pattern.

3. Machine Buffed Upholstery

The grain of this leather has been split off very thin on a splitting machine, and makes the cowhide buffing for books, etc. (see P. 6, No. 6) The surface made by splitting off the grain is finished as in the Hand Buffed. Used for medium price automobiles and for furniture.

4. Deep Buffed Upholstery

A heavy grain split which may have been any one of the three preceding has been taken off and the flesh split shown finished like the two previous samples and embossed. This is upholstery leather considerably cheaper than the preceding. Below the Deep Buffed a "second split" is taken off and finished the same way, but is not as strong or durable. Upholstery hides yield three to five splits.



5. Case Leather

Cowhide tanned in hemlock and oak bark liquors. Dyed and glazed smooth on grain. Used for suit cases and in the heavier thicknesses for traveling bags. The flesh side has been split off and made into insole splits. The brown or tan shade is most common for suit cases and the black for bags.

6. Strap Leather

Cowhide tanned like case leather and split to a heavier weight. Used for suit case straps. Comes in various thicknesses, the heavier being used for trunk straps, arch supports, and lamb's wool soles.

7. Boarded Belt

Cowhide, bark-tanned, and split. Made soft for tubular belts. Boarded by rolling grain over on itself to give square pattern when done in two directions. Belt leather is also made the same as strap leather split thin, and sometimes buffed on the grain for either smooth or velvet finish.

8. Crepe Grain Cowhide

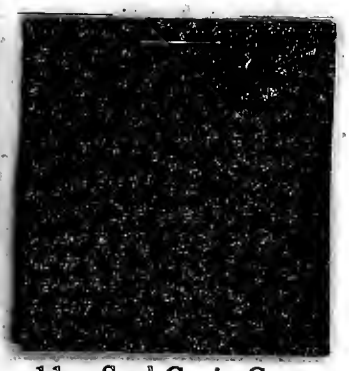
Cowhide tanned with hemlock and oak bark. Table-colored on grain and embossed with a pattern known as "Crepe Grain". Used for traveling bags and novelties. Cowhide for bags is embossed in various patterns or comes smooth. Smooth leather bags of the best kind are made from the Boarded Veals (shown on page 2) or from Russia Veals (similar to Russia Calf, page 2,) known as Calf bags.

9. Seal

Skin of the hair seal, tanned with gambier and other vegetable tannins. Used for ladies' hand bags, novelties, bookbinding, etc. This specimen known as Pin Seal shows the natural grain of seal after boarding. The finest skins are selected and are split to a light weight. Other skins are embossed and boarded to raise the grain known as Seal Grain shown in No. 11. This grain is popular in bags, and is imitated in sheep, goat and cowhide, less expensive and less durable.

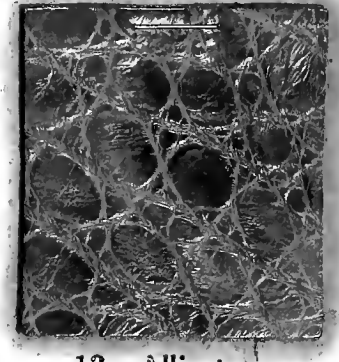
10. Walrus

Sealskin of a much larger and coarser grain than the preceding. The deep ridges are caused by allowing the skin to shrink in the course of tanning. By genuine walrus is meant sealskin shrunk to make the so-called walrus grain. This leather is used for bags, men's belts, etc., and is imitated in cowhide, goatskin, and splits. Real walrus is a much heavier skin, about 1½ in. thick, and is used by the jewelry trade for polishing purposes.



11. Seal Grain Goat

India-tanned goatskin embossed with a seal grain. (See under India Sheep.) Used for bags, novelties and book-binding. Cheaper than sealskin. Some sheep leather is also used for bags embossed with a seal or other grains. Linings of traveling bags are often made of sheepskin finished natural color or in various colors.



12. Alligator

Skin of the alligator of Florida and tropical America. The smooth part shown comes from the belly and sides, the horny part seen on bags from the back. Vegetable tannage. Used for bags and novelties. Its peculiar grain is imitated in sheepskin by embossing.

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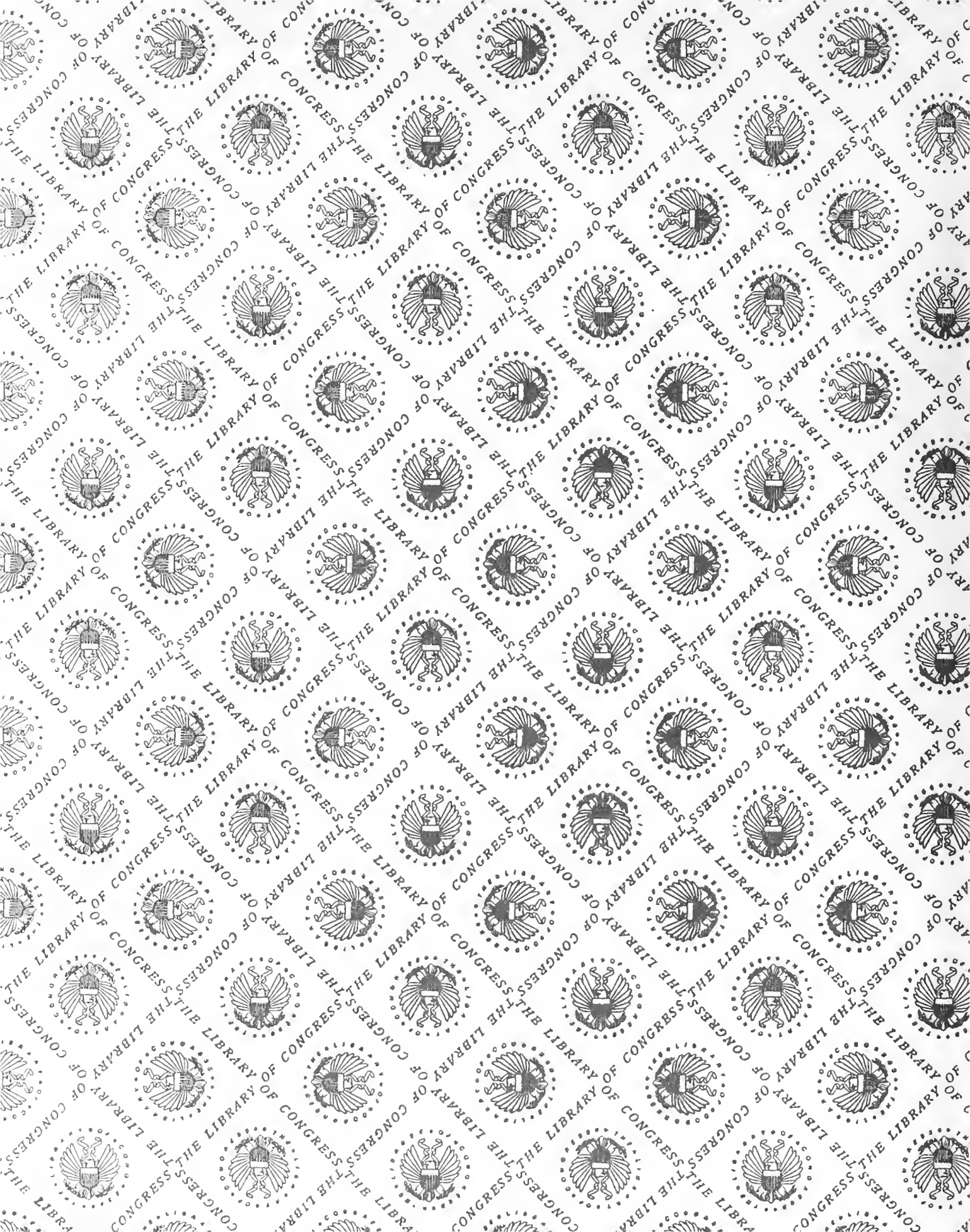
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